

Patent
Serial No. 09/623,945
Amendment in Reply to Office Action of March 27, 2006

REMARKS/ARGUMENTS

This Amendment is being filed in response to the Office Action dated March 27, 2006. Reconsideration and allowance of the application in view of the amendments made above and the remarks to follow are respectfully requested.

Claims 1-4 and 10-29 are currently pending in the Application. Claims 1 and 3 are independent claims.

In the Office Action, Claims 10-13 are rejected under 35 U.S.C. §101 as allegedly being directed to non-statutory subject matter.

Applicant respectfully disagrees with and explicitly traverses this ground for rejecting Claims 10-13. It is the Applicants' position that the claims require statutory subject matter. However, in the interest of furthering the prosecution of this matter, Applicants have elected to amend the claims to more clearly state the invention. Specifically, Applicants have amended Claims 10 and 13 to more clearly state a signal in a carrier stream ... The claims in fact require a conversion of one physical thing, namely "the data", to another physical thing, namely the "encoded data". The claims thereby produce a tangible result as required by Claims 10 and 13.

The courts have held on numerous prior occasions that the conversion of a physical thing (e.g., content) into another physical thing (e.g., spoiled content) is statutory subject matter. For example, the courts analyzed a similar claim configuration in

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"In re Taner," 214 USPQ 678, 681 (C.C.P.A. 1982), and found that
(emphasis added)

Appellants' claimed process involves the taking of substantially spherical seismic signals obtained in conventional seismic exploration and converting (``simulating from'') those signals into another form, i.e., to a form representing the earth's response to cylindrical or plane waves. Thus the claims set forth a process and are statutory within §101.

... the views expressed by this court in In re Sherwood, . . . and In re Johnson, . . . where signals were viewed as physical and the processes were viewed as transforming them to a different state. . . .

The courts in "*AT&T Corp. v. Excel Communications, Inc.*," 50 USPQ 2d 1447, 1452 (Fed. Cir. 1999) (quoting *Diamond v. Diehr*, 450 U.S. 175, 192 (1981)) recognized that (emphasis added)

The notion of "physical transformation" can be misunderstood. In the first place, it is not an invariable requirement, but merely one example of how a mathematical algorithm may bring about a useful application. As the Supreme Court itself noted, "when [a claimed invention] is performing a function which the patent laws were designed to protect (e.g., transforming or reducing an article to a different state or thing), then the claim satisfies the requirements of § 101." . . . The "e.g." signal denotes an example, not an exclusive requirement.

[T]he claimed steps of "converting", "applying", "determining", and "comparing" are physical process steps. . . . [which] comprise statutory subject matter. *Arrhythmia Research Tech., Inc. v. Corazonix Corp.*, 22 USPQ 2d 1033, 1038 (Fed. Cir. 1992).

Clearly in light of the substantial Federal Circuit holdings on this point, Claims 10 and 13 require statutory subject matter and recognition as such is respectfully requested. Accordingly, it

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is respectfully requested that the 35 U.S.C. §101 rejection of Claims 10-13 be withdrawn.

Claims 1, 2, 10, 11, 14, 15, 18, 20, 21, 22 and 25-29 are rejected under 35 U.S.C. §112, second paragraph, as allegedly being incomplete for omitting essential steps, with such alleged omission amounting to a gap between the steps as stipulated in MPEP §2172.01. This rejection is respectfully traversed. It is respectfully submitted that the only steps required are those that differentiate the claimed invention from the prior art. As long as the steps are related, there is no basis for sustaining this rejection. Illustrative support for the claimed subject matter, for example as contained in Claim 1 is found in the specification on page 2, lines 7-20. It must be noted however that it is not the Applicants intention that the claims as submitted be limited to any one of the particular illustrative embodiments. It is respectfully submitted that the explanation provided above overcomes the 35 U.S.C. §112, second paragraph rejections. Accordingly, it is respectfully requested that the 35 U.S.C. §112, second paragraph rejections be withdrawn.

Claims 1, 2, 10, 11, 14, 15, and 25-29 are rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 6,122,379 to Barbir ("Barbir"). Claims 3, 4, 12, 13, 16, 17, 19, 23, and 24 are rejected under 35 U.S.C. §102(e) as allegedly anticipated by U.S. Patent No. 6,332,194 to Bloom ("Bloom"). These rejections are respectfully traversed.

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Barbir shows a system of compressing and encrypting data. The Office Action interprets the RNG of Barbir as where the supplemental data is derived from and the supplemental data is the induced randomness (see, Office Action, page 5, numbered paragraph 10). Even if this awkward construction were accepted arguendo, this construct does not render claim 1, for example, anticipated.

It is respectfully submitted that the method of Claim 1 is not anticipated or made obvious by the teachings of Barbir. For example, Barbir does disclose or suggest, a method that amongst other patentable elements, comprises (illustrative emphasis provided) "embedding supplemental data by inserting the supplemental data into the data using at least one parameter which is altered in order to embed the supplemental data; and deriving the at least one parameter from other data available during encoding" as required by Claim 1.

Based on the foregoing, the Applicants respectfully submit that independent Claim 1 is patentable over Barbir and notice to this effect is earnestly solicited. Claims 2, 10, 11, 14, 15, 18, 20, 21, 22, 25-29 depend from Claim 1 and accordingly are allowable for at least this reason as well as for the separately patentable elements contained in each of said claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

Bloom shows a system for insertion of a watermark into data. The cited section discusses data characteristics that may be

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derived from the data is an average of many block DCT coefficients from various locations in the data which may be performed in the compressed domain. Bloom states that in the compressed domain, the compressed data must first be entropy encoded before the watermark insertion (see, sections of Bloom cited in the Office Action, namely, Col. 6, lines 12-29). Clearly, the compression utilized, such as MPEG, MPEG2, H.261, H.263, JPEG is not determined by the DCT coefficients (see, Col. 6, lines 13-17). FIG. 3 steps 306 through 310 show the same.

It is respectfully submitted that the method of Claim 3 is not anticipated or made obvious by the teachings of Bloom. For example, Bloom does disclose or suggest, a method that amongst other patentable elements, comprises (illustrative emphasis provided) "partitioning the data into frames; determining a set of parameters for each frame; reducing the data rate of the input signal by applying an algorithm which is controlled by the parameter set whereby encoded data includes the set of parameters or at least data which can be used to derive the parameter set and the data rate-reduced signal; and embedding supplemental data into encoded data, the parameter set is affected by the supplemental data" as required by Claim 3.

Based on the foregoing, the Applicants respectfully submit that independent Claim 3 is patentable over Bloom and notice to this effect is earnestly solicited. Claims 4, 12, 13, 16, 17, 19, 23 and 24 depend from Claim 3 and accordingly are allowable for at

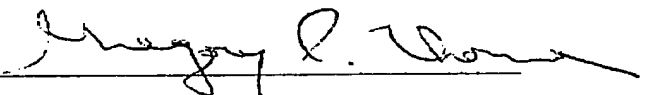
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least this reason as well as for the separately patentable elements contained in each of said claims. Accordingly, separate consideration of each of the dependent claims is respectfully requested.

In addition, Applicants deny any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, the Applicants reserve the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

Applicants have made a diligent and sincere effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited.

Respectfully submitted,

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